

Ref. No.	Description	Mfr's Part No.
R12	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R13	Thick Film Chip(0805), 220 Kohm, 1/8W, +/-5%	JRC220HCX
R14	Thick Film Chip(0805), 100 Kohm, 1/8W, +/-5%	JRC100HCX
R15	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R16	Thick Film Chip(0805), 4.7 Kohm, 1/8W, +/-5%	JRC4R7KCX
R17	Thick Film Chip(0805), 560 Kohm, 1/8W, +/-5%	JRC560KCX
R18	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R19	Thick Film Chip(0805), 22 Kohm, 1/8W, +/-5%	JRC022KCX
R21	Thick Film Chip(0805), 560 Kohm, 1/8W, +/-5%	JRC560KCX
R22	Thick Film Chip(0805), 3.3 Kohm, 1/8W, +/-5%	JRC3R3KCX
R23	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R24	Thick Film Chip(0805), 560 Kohm, 1/8W, +/-5%	JRC560KCX
R26	Thick Film Chip(0805), 2.2 Kohm, 1/8W, +/-5%	JRC2R2KCX
R27	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R28	Thick Film Chip(0805), 100 Kohm, 1/8W, +/-5%	JRC100HCX
R29	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R31	Thick Film Chip(0805), 22 Kohm, 1/8W, +/-5%	JRC022HCX
R32	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R33	Thick Film Chip(0805), 15 Kohm, 1/8W, +/-5%	JRC015KCX
R34	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R36	Thick Film Chip(0805), 15 Kohm, 1/8W, +/-5%	JRC015KCX
R37	Thick Film Chip(0805), 15 Kohm, 1/8W, +/-5%	JRC015KCX
R38	Thick Film Chip(0805), 100 Kohm, 1/8W, +/-5%	JRC100HCX
R39	Thick Film Chip(0805), 12 Kohm, 1/8W, +/-5%	JRC012KCX
R41	Thick Film Chip(0805), 47 Kohm, 1/8W, +/-5%	JRC047KCX
R42	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R43	Thick Film Chip(0805), 15 Kohm, 1/8W, +/-5%	JRC015KCX
R44	Thick Film Chip(0805), 100 Kohm, 1/8W, +/-5%	JRC100KCX
R46	Thick Film Chip(0805), 27 Kohm, 1/8W, +/-5%	JRC270KCX
R48	Thick Film Chip(0805), 150 ohm, 1/2W, +/-5%	JRI150HCX
R51	Thick Film Chip(0805), 100 ohm, 1/8W, +/-5%	JRC100HCX
R52	Thick Film Chip(0805), 10 ohm, 1/8W, +/-5%	JRC010HCX
R53	Thick Film Chip(0805), 470 ohm, 1/8W, +/-5%	JRC470HCX
R54	Thick Film Chip(0805), 2.7 Kohm, 1/8W, +/-5%	JRC2R7KCX
R56	Thick Film Chip(0805), 47 ohm, 1/8W, +/-5%	JRC047HCX
R57	Thick Film Chip(0805), 10 ohm, 1/8W, +/-5%	JRC010HCX
R58	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R59	Thick Film Chip(0805), 3.9 Kohm, 1/8W, +/-5%	JRC3R9KCX
R61	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R62	Thick Film Chip(0805), 22 Kohm, 1/8W, +/-5%	JRC022HCX
R63	Thick Film Chip(0805), 100 Kohm, 1/8W, +/-5%	JRC100HCX
R64	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R66	Thick Film Chip(0805), 3.9 Kohm, 1/8W, +/-5%	JRC3R9KCX
R67	Thick Film Chip(0805), 100 ohm, 1/8W, +/-5%	JRC100HCX
R68	Thick Film Chip(0805), 22 Kohm, 1/2W, +/-5%	JRI022HCX
R69	Thick Film Chip(0805), 470 ohm, 1/2W, +/-5%	JRI470HCX
R70	Thick Film Chip(0805), 4.7 Kohm, 1/8W, +/-5%	JRC4R7KCX
R71	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R72	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R73	Thick Film Chip(0805), 3.3 Kohm, 1/8W, +/-5%	JRC3R3KCX

Ref. No	Description	Mfr's Part No.
R74	Thick Film Chip(0805), 18 Kohm, 1/8W, +/-5%	JRC018KCX
R76	Thick Film Chip(0805), 4.7 Kohm, 1/8W, +/-5%	JRC4R7KCX
R77	Thick Film Chip(0805), 22 Kohm, 1/8W, +/-5%	JRC022KCX
R78	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R79	Thick Film Chip(0805), 1.8 Kohm, 1/8W, +/-5%	JRC1R8KCX
R80	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R81	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R83	Thick Film Chip(0805), 100 Kohm, 1/8W, +/-5%	JRC100KCX
R84	Thick Film Chip(0805), 470 ohm, 1/8W, +/-5%	JRC470HCX
R85	Thick Film Chip(0805), 0 Kohm, 1/8W, +/-5%	JRC000HCX
R86	Thick Film Chip(0805), 2.2 Kohm, 1/8W, +/-5%	JRC2R2KCX
R87	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R88	Thick Film Chip(0805), 470 ohm, 1/8W, +/-5%	JRC470HCX
R89	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R91	Thick Film Chip(0805), 220 Kohm, 1/8W, +/-5%	JRC220HCX
R92	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R93	Thick Film Chip(0805), 100 Kohm, 1/8W, +/-5%	JRC100KCX
R94	Thick Film Chip(0805), 10 ohm, 1/8W, +/-5%	JRC010KCX
R97	Thick Film Chip(0805), 10 ohm, 1/8W, +/-5%	JRC010HCX
R99	Thick Film Chip(0805), 120 Kohm, 1/8W, +/-5%	JRC120KCX
R101	Thick Film Chip(0805), 2.2 ohm, 1/8W, +/-5%	JRC2R2HCX
R102	Thick Film Chip(0805), 1.8 Kohm, 1/8W, +/-5%	JRC1R8KCX
R103	Thick Film Chip(0805), 2.2 ohm, 1/8W, +/-5%	JRC2R2HCX
R104	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R106	Thick Film Chip(0805), 1 Kohm, 1/8W, +/-5%	JRC001KCX
R107	Thick Film Chip(0805), 3.3 Kohm, 1/8W, +/-5%	JRC3R3KCX
R120	Thick Film Chip(0805), 0 ohm, 1/8W, +/-5%	JRC000HCX
R601	Thick Film Chip(0805), 330 Kohm, 1/8W, +/-5%	JRC330KCX
R602	Thick Film Chip(0805), 2.2 Kohm, 1/8W, +/-5%	JRC2R2KCX
R603	Thick Film Chip(0805), 2.2 Kohm, 1/8W, +/-5%	JRC2R2KCX
R604	Thick Film Chip(0805), 56 Kohm, 1/8W, +/-5%	JRC056KCX
R606	Thick Film Chip(0805), 1 Mohm, 1/8W, +/-5%	JRC001MCX
R607	Thick Film Chip(0805), 680 ohm, 1/8W, +/-5%	JRC680HCX
R608	Thick Film Chip(0805), 470 Kohm, 1/8W, +/-5%	JRC470KCX
R611	Thick Film Chip(0805), 10 Kohm, 1/8W, +/-5%	JRC010KCX
R613	Thick Film Chip(0805), 56 Kohm, 1/8W, +/-5%	JRC056KCX
R614	Thick Film Chip(0805), 3.9 Kohm, 1/8W, +/-5%	JRC3R9KCX
R616	Thick Film Chip(0805), 150 Kohm, 1/8W, +/-5%	JRC150KCX
R617	Thick Film Chip(0805), 5.6 Kohm, 1/8W, +/-5%	JRC5R6KCX
R618	Thick Film Chip(0805), 3.9 Kohm, 1/8W, +/-5%	JRC3R9KCX
R619	Thick Film Chip(0805), 15 Kohm, 1/8W, +/-5%	JRC015KCX
R621	Thick Film Chip(0805), 22 Kohm, 1/8W, +/-5%	JRC022KCX
R630	Thick Film Chip(0805), 1 Mohm, 1/8W, +/-5%	JRC001MCX
CH2	Thermistor, 6.8 Kohm	JZT008KCX
Semifixed Resistors		
RV1-3	50KB 6H 3P	JU50KB6H3
RV4	5KB 6H 3P	JU05KB6H3
RV6	50KB 6H 3P	JU50KB6H3

Ref. No.	Description	Mfr's Part No.
X-TALS		
X1	Resonator, Ceramic, ZTB 455ET 4C	JXCR455KX
X2	(HC-49/S), 20.945MHz, 20pF, 10PPM	JX20945XS
X3	(UM-5), 10.475MHz 20pF 5PPM	JX10475XB
Jack		
EXT	Earphone Jack, JY3509-01-010(3.5pie)	JZJEJ3509
Wires		
11	General Wire, 0.16/7 2-7 Black 100	GWGA3L100
11-1	General Wire, 0.16/7 2-7 Brown 100	GWGA3W100
ANT1	Hirap Braid Wire, AWG (1Cm)	GNVWHAW24
End of ASS'Y-PCB, Main		
P2	ASSY-PCB, VCO	GPSVC0008
Coils		
T701	IFT,71-U, 5.5mm	JA71XUXX
L701	Inductor, Chip, 10uH(LEM2520)	JBII10XCX
L704	Inductor, Chip, 1uH(LEM2520)	JBII1UCAX
L705	Inductor, Chip, 2.7uH(LEM2520)	JBII2R7CX
L706	Inductor, Chip, 3.3uH(LEM2520)	JBII3R3CX
L707	Inductor, Chip, 18uH(LEM2520)	JBII18NXX
L708	Inductor, Chip, 10uH(LEM2520)	JBII10XCX
Capacitors		
C701	Tantalum, Chip, 1uF 16V(A)	JCTC01016
C702	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C703	Tantalum, Chip, 4.7uF 16V(A)	JCTC4R716
C704	Tantalum, Chip, 4.7uF 16V(A)	JCTC0125A
C705	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C706	Tantalum, Chip, 0.1uF 16V(A)	JCTC0125A
C707	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C708	Ceramic(1608), 1P, 50V, CG, +/-0.25pF(Chip)	JCH010CCC
C709	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C710	Ceramic(1608), 0.1uF, 50V, B, +/-10%(Chip)	JCH104BKC
C722	Ceramic(1608), 18P, 50V, CH, +/-5%(Chip)	JCC180CJC
C712	Ceramic(1608), 1P, 50V, CG, +/-0.25pF(Chip)	JCH010CCC
C713-715	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C717	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C718	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C719	Ceramic(1608), 1P, 50V, CG, +/-0.25pF(Chip)	JCH010CCC
C720	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C721	Ceramic(1608), 1P, 50V, CG, +/-0.25pF(Chip)	JCH010CCC
C723	Ceramic(1608), 33P, 50V, CG, +/-5%(Chip)	JCH330CJC
C724	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C725	Ceramic(1608), 2P, 50V, CG, +/-0.25pF(Chip)	JCH020CCC
C726	Tantalum, Chip, 10uF 6.3V(A)	JCTC10063

Ref. No.	Description	Mfr's Part No.
C727-728	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C729	Tantalum, Chip, 10uF 6.3V(A)	JCTC10063
C734	Ceramic(1608), 10P, 50V, CG, +/-5%(Chip)	JCH100CCC
C731-732	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C741	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C730	Ceramic(1608), 0.1uF, 50V, B, +/-10%(Chip)	JCH104BKC
Diode		
D702-704	Diode, Varicap, Chip, KDV251S, SOT-23	JDKDV251S
Integrated Circuit		
IC701	IC, LV2105, PLL	JILV2105X
Resistors		
R701	Thick Film Chip(1608), 12 Kohm, 1/10W, +/-5%	JRH012KCX
R702	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R703	Thick Film Chip(1608), 12 Kohm, 1/10W, +/-5%	JRH012KCX
R704	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R705	Thick Film Chip(1608), 100 Kohm, 1/10W, +/-5%	JRH100HCX
R706	Thick Film Chip(1608), 560 Kohm, 1/10W, +/-5%	JRH560HCX
R707	Thick Film Chip(1608), 1 Mohm, 1/10W, +/-5%	JRH001MCX
R708	Thick Film Chip(1608), 47 ohm, 1/10W, +/-5%	JRH047HCX
R709	Thick Film Chip(1608), 4.7 ohm, 1/10W, +/-5%	JRH4R7KCX
R710	Thick Film Chip(1608), 56 Kohm, 1/10W, +/-5%	JRH056HCX
R711	Thick Film Chip(1608), 22 Kohm, 1/10W, +/-5%	JRH022KCX
R713	Thick Film Chip(1608), 220 ohm, 1/10W, +/-5%	JRH220HCX
R714	Thick Film Chip(1608), 390 ohm, 1/10W, +/-5%	JRH390HCX
R715	Thick Film Chip(1608), 22 Kohm, 1/10W, +/-5%	JRH022KCX
R716	Thick Film Chip(1608), 470 ohm, 1/10W, +/-5%	JRH470HCX
R717	Thick Film Chip(1608), 390 Kohm, 1/10W, +/-5%	JRH390KCX
R718	Thick Film Chip(1608), 100 Kohm, 1/10W, +/-5%	JRH100KCX
R719	Thick Film Chip(1608), 220 Kohm, 1/10W, +/-5%	JRH220KCX
R720	Thick Film Chip(1608), 1 Kohm, 1/10W, +/-5%	JRH001KCX
R721	Thick Film Chip(1608), 220 ohm, 1/10W, +/-5%	JRH220HCX
R722	Thick Film Chip(1608), 1.5 Kohm, 1/10W, +/-5%	JRH1R5KCX
R723	Thick Film Chip(1608), 1 Kohm, 1/10W, +/-5%	JRH001KCX
R724	Thick Film Chip(1608), 4.7 Kohm, 1/10W, +/-5%	JRH4R7KCX
R725	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R726	Thick Film Chip(1608), 22 ohm, 1/10W, +/-5%	JRH022HCX
R727	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R728	Thick Film Chip(1608), 470 ohm, 1/10W, +/-5%	JRH470HCX
R729	Thick Film Chip(1608), 3.3 Kohm, 1/10W, +/-5%	JRH3R3KCX
R730	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R735	Thick Film Chip(1608), 220 Kohm, 1/10W, +/-5%	JRH220KCX
R740	Thick Film Chip(1608), 4.7 Mohm, 1/10W, +/-5%	JRH4R7MCX
R741	Thick Film Chip(1608), 8.2 Mohm, 1/10W, +/-5%	JRH8R2MCX
R745	Thick Film Chip(1608), 100 ohm, 1/10W, +/-5%	JRH100HCX
R746	Thick Film Chip(1608), 4.7 Kohm, 1/10W, +/-5%	JRH4R7KCX

Ref. No	Description	Mfr's Part
Transistors		
Q701	(Chip), KTA1505SY, SOT-23	JTA1505SY
Q702	(Chip), KTC3876SY(WY), SOT-23	JTC3876SY
Q703	(Chip), KTC3882, SOT-23	JTC3882SX
Q704	(Chip), 2SC3356(R25)	JT2SC3356
Q706	(Chip), KTC3882, SOT-23	JTC3882SX
Q707	(Chip), KRC114SRTK, SOT-23	JTC114SRT
Q711	(Chip), KTC3875Y, SOT-23	JTC3875YX
Wafers		
8	Flat Wafer 6P 2mm(F200M 6SS 2)	GWCF062XX
9	Flat Wafer 9P 2mm(F200M 9SS 2)	GWCF092XX
P3	ASS'Y-PCB, FRONT	JPFXX0181
Coils		
L201	Inductor, Chip, 4.7uH(LEM2520)	JBII4R7CB
L202	Inductor, Chip, 0.1uH(LEM2520)	JBII1R1XXX
L206-209	Inductor, Chip, 0.1uH(LEM2520)	JBII1R1XXX
L211	Inductor, Chip, 0.1uH(LEM2520)	JBII1R1XXX
Capacitors		
C201	Ceramic(1608), 0.022uF, 50V, B, +/-10%(Chip)	JCH223BKC
C202	Ceramic(1608), 22P, 50V, CG, +/-5%(Chip)	JCH220CJC
C203	Ceramic(1608), 20P, 50V, CG, +/-5%(Chip)	JCH200CJC
C204	Tantalum, Chip, 1uF 16V(A)	JCJC01016
C206	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C207	Tantalum, Chip, 0.1uF 16V(A)	JCTC0125A
C208	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C209	Ceramic(1608), 0.022uF, 50V, B, +/-10%(Chip)	JCH223BKC
C211	Ceramic(1608), 470P, 50V, B, +/-10%(Chip)	JCH471BKC
C212	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C213	Elect, 10V, 5x7, 47uF	JCEBA47XX
C214	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C216-217	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C218-219	Tantalum, Chip, 47uF 16V(D)	JCTC47016
C221	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C222	Tantalum, Chip, 10uF 16V(B)	JCTC10016
C223	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C224	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C226	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C227	Tantalum, Chip, 0.47uF 25V(A)	JCTC47100
C228	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C229	Ceramic(1608), 0.1uF, 50V, B, +/-10%(Chip)	JCH104BKC
C233-234	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C236	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C237-238	Ceramic(1608), 100P, 50V, CG, +/-5%(Chip)	JCH101CJC
C239-240	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C243-246	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC

Ref. No.	Description	Mfr's Part No.
Diodes		
D201-203	Switching(Chip), ISS355	JD1SS355C
D204	Switching(Chip), S181RTK(MMBD1205)	JDS181RTK
D206	Zener(Chip), BZX84C10	JDBZX10V0
D211-214	Switching(Chip), ISS355	JD1SS355C
Integrated Circuits		
IC201	IC(Chip), 24C02, EPROM	J124C02XX
IC202	IC(Chip), KIA704F, Reset	J117042FX
IC203	IC(Chip), KIA78L05F, Regulator	J1178L05F
IC204	IC, SY-252, KS57C2408, CPU	J1SY252XX
Volumes		
VR201	Volume, Single Round, A50K, w/nut, Washer	JVR050KAV
VR202	Volume, Single Round, B10K, w/nut, Washer	JVR010KBV
LCD		
T1	LCD, KXN31931DAP	JLCK31931
Resistors		
R201-203	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R204	Thick Film Chip(1608), 470 Kohm, 1/10W, +/-5%	JRH470KCX
R205	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R206-207	Thick Film Chip(1608), 1 Mohm, 1/10W, +/-5%	JRH001MCX
R208	Thick Film Chip(1608), 470 Kohm, 1/10W, +/-5%	JRH470KCX
R209	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R211-213	Thick Film Chip(1608), 1 Mohm, 1/10W, +/-5%	JRH001MCX
R214	Thick Film Chip(1608), 2.2 Kohm, 1/10W, +/-5%	JRH2R2KCX
R216-218	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R219	Thick Film Chip(1608), 1 Mohm, 1/10W, +/-5%	JRH001MCX
R221	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R222	Thick Film Chip(1608), 1 Mohm, 1/10W, +/-5%	JRH001MCX
R223	Thick Film Chip(1608), 100 Kohm, 1/10W, +/-5%	JRH100KCX
R224	Thick Film Chip(1608), 0 ohm, 1/10W, +/-5%	JRH000HCX
R226	Thick Film Chip(1608), 120 Kohm, 1/10W, +/-5%	JRH120KCX
R227	Thick Film Chip(1608), 180 Kohm, 1/10W, +/-5%	JRH180KCX
R228	Thick Film Chip(1608), 820 Kohm, 1/10W, +/-5%	JRH820KCX
R233	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R234	Thick Film Chip(1608), 4.7 Kohm, 1/10W, +/-5%	JRH4R7KCX
R251-252	Thick Film Chip(1608), 10 Kohm, 1/10W, +/-5%	JRH010KCX
R229	Thick Film Chip(1608), 22 Kohm, 1/10W, +/-5%	JRH022KCX
R236	Thick Film Chip(1608), 39 Kohm, 1/10W, +/-5%	JRH039KCX
R239	Thick Film Chip(1608), 47 Kohm, 1/10W, +/-5%	JRH047HCX
R231-232	Thick Film Chip(1608), 47 Kohm, 1/10W, +/-5%	JRH047KCX
R237-238	Thick Film Chip(1608), 47 Kohm, 1/10W, +/-5%	JRH047KCX
R241	Thick Film Chip(1608), 2.2 Kohm, 1/10W, +/-5%	JRH2R2KCX
R242	Thick Film Chip(1608), 4.7 Kohm, 1/10W, +/-5%	JRH147KCX
R247	Thick Film Chip(1608), 100 Kohm, 1/10W, +/-5%	JRH100KCX

Ref. No.	Description	Mfr's Part No.
R248	Thick Film Chip(1608), 2.2 Kohm, 1/10W, +/-5%	JRH2R2KCX
R253	Thick Film Chip(1608), 100 Kohm, 1/10W, +/-5%	JRH100KCX
R254	Thick Film Chip(1608), 120 Kohm, 1/10W, +/-5%	JRH120KCX
R256	Thick Film Chip(1608), 220 ohm, 1/10W, +/-5%	JRH220HCX
R281-299	Thick Film Chip(1608), 100 Kohm, 1/10W, +/-5%	JRH100KCX
CON204	Thick Film Chip(1608), 0 ohm, 1/10W, +/-5%	JRH000HCX
P21	Thick Film Chip(1608), 0 ohm, 1/10W, +/-5%	JRH000HCX
Transistors		
Q201	(Chip), KRA101S, SOT-23	JTA101SXX
Q202	(Chip), KTC4375, SOT-89	JT2SC4375
Q203	(Chip), KRA101S, SOT-23	JTA101SXX
Q206-208	(Chip), KTC3875Y, SOT-23	JTC3875YX
X-TAL		
X201	(HC-49/S), 4.19430MHz 18pF 20PPM	JX041943X
P4	ASSY-PCB, Channel	JPDCX0120
SW207	Switch, Channel, YPS2101 15SK(15mm), w/nut, Washer	JSC2101YX
Pilot Lamp		
PL201-202	Pilot Lamp, 3pie 60mA 10V	JL3P10VXX
End of ASSY-PCB Front		
	ASSY-HEAT Sink	JPWXX0268
P5	ASSY-PCB, Power Module	JPMPX0268
Coil		
L801	Inductor, 2.2uH(LAL04NA)	JBII2R2UX
Resistor		
R49	Metal Resistor(With Bead core Bfo3) 68 ohm 1W(ST)	JR0068HDS
Transistors		
Q7	2SC 1946A	JT2S1946A
Q8	2SC 1971	JT2S1971X
Capacitors		
C801-804	Ceramic(0805), 0.001uF, 50V, CH, +/-5%(Chip)	JCC102CJC
C805-808	Ceramic(0805), 15P, 50V, CH, +/-5%(Chip)	JCC151CJC
C809-812	Ceramic(0805), 180P, 50V, CH, +/-5%(Chip)	JCC181CJC
C813-816	Ceramic(0805), 27P, 50V, CH, +/-5%(Chip)	JCC270CJC
C817-820	Ceramic(0805), 68P, 50V, CH, +/-5%(Chip)	JCC680CJC
C821-824	Ceramic(0805), 47P, 50V, CH, +/-5%(Chip)	JCC470CJC

Ref. No	Description	Mfr's Part No.
Connector		
28	CH-239(Sin) w/terminal LUG	GNCAC239X
End of ASS'Y-PCB, Power Module		
End of ASS'Y-HEAT Sink		
	ASS'Y-MICROPHONE	JMHTX252X
Capacitors		
C301-302	Ceramic(1608), 0.1uF, 50V, B, +/-10%(Chip)	JCH104BKC
C303	Ceramic(1608), 0.001uF, 50V, B, +/-10%(Chip)	JCH102BKC
C304	Tantalum, Chip, 2.2uF 16V(A)	JCTC2R216
C306-307	Ceramic(1608), 20P, 50V, CG, +/-5%(Chip)	JCH200CJC
C311	Ceramic(1608), 0.01uF, 50V, B, +/-10%(Chip)	JCH103BKC
C313	Tantalum, Chip, 22uF 16V(B2)	JCTC22026
C315	Tantalum, Chip, 22uF 16V(B2)	JCTC22026
C349	Tantalum, Chip, 47uF 16V(D)	JCTC47016
Integrated Circuit		
IC301	IC, LC7365N, DTMF	JILC7365X
Crystal		
X301	(HC-49/S), 3.579545MHz, 30pF, 50PPM	JX0358XXX
Diode		
D301-303	Switching, Chip, ISS355	JD1SS355C
Resistors		
R301	Thick Film Chip(1608), 100 Kohm, 1/10W, +/-5%	JRH100KCX
R302-304	Thick Film Chip(1608), 2.2 Kohm, 1/10W, +/-5%	JRH2R2KCX
R306	Thick Film Chip(1608), 330 ohm, 1/10W, +/-5%	JRH330HCX
R309	Thick Film Chip(1608), 2.2 Kohm, 1/10W, +/-5%	JRH2R2KCX
R311	Thick Film Chip(1608), 1 Kohm, 1/10W, +/-5%	JRH001KCX
Switches		
SW306-308	Tact Switch, GT-1102U	JST1102UX
SW309	Slide Switch, GS2206A	JSS2206AX
Transistor		
Q301-302	(Chip), KRC104SRTX, SOT-23	JTC104SRT
Semifixed Resistor		
VR301	(Chip), MVR32 HXBRN103	JU103MVRX
End of ASS'Y-MICROPHONE		

VOLTAGE CHART

Measurement Conditions:

Power supply voltage : 13.8V DC
 Test equipment : Digital Voltmeter (HC-3500T)
 Measurement channel : 146.520MHz
 Unless otherwise specified, set controls are as follows:
 Channel : 146.520MHz SQ : Min Volume : Max

Symbol No.	Name	RX / TX		Base Gate	Collector Drain	Emitter Source
Q1	2SC2412K	RX	No SQ	0	SIGNAL	GND
		RX	SQ	0.66		
Q2	2SC4081R(BR)	RX	No SQ	0.62	3.38	GND
		RX	SQ	0.54	3.69	
Q3	2SC2059	RX		0.71	6.49	GND
Q4	3SK131	RX	GATE 1	0.01	7.60	0.03
			GATE 2	0.03		
Q5	2SC2412K	RX	No SQ	0	SIGNAL	GND
			SQ	0.66		
Q6	3SK131	RX	GATE 1	0	6.54	0.12
			GATE 2	6.13		
Q7	2SC1946A	TX		0.66	13.80	GND
Q8	2SC1971	TX		0.06	12.00	GND
Q9	2SC2954	TX		0.25	11.58	0.64
Q11	2SC3356	TX		1.09	6.06	0.38
Q12	2SC3356	RX TX		1.40	7.00	0.68
Q13	2SB1292F	TX ON		12.92	12.50	13.80
		TX OFF		13.76	0	13.80
Q14	2SC2412K	TX		0.66	11.59	GND

Symbol No.	Name	RX / TX		Base Gate		Collector Drain	Emitter Source	
Q16	2SA1576R	TX		2.93		0.82	3.27	
Q17	KRA107S	TX	LOW	0.06		GND	0.88	
			HIGH	3.33		GND	3.28	
Q18	2SB1132	TX		7.19		7.83	7.89	
Q19	DTC114EU	TX		4.52		0.10	GND	
Q21	UMC5NTR	RX TX	PIN NO	1	2	3	4	5
			RX	GND	4.78	7.48	7.71	0.04
			TX	GND	0.10	7.84	0	7.87
Q22	2SA1797	RX TX		13.04		13.74	3.80	
Q23	2SC4081	RX TX		0.71		0.14	GND	
Q24	2SK880	RX		1.63		7.80	2.11	
Q701	KTA1505SY	RX TX		5.55		1.79	5.55	
Q702	KTC3876SY	RX TX		0.01		1.79	GND	
Q703	KTC3882	RX TX		3.00		4.90	3.00	
Q704	2SC3356	RX TX		0.27		4.85	GND	
Q706	KTC3882	RX TX		0.13		7.83	0.04	
Q707	KRC114SRTK	RX		4.05		0.02	GND	
		TX		0.10		1.50	GND	
Q711	KTC3875	RX		0		5.40	GND	
		TX		0.60		0	GND	
Q201	KRA101S	RX	NO SQ	5.49		0	5.55	
			SQ	0		5.55	5.55	
Q202	KTC4375	RX TX		10.36		9.83	13.75	
Q203	KRA101S	RX		4.67		0.82	5.05	
		TX		2.16		5.04	5.04	
Q206	KTC3875	RX TX		0.05		4.92	GND	

Symbol No.	Name	RX / TX	Base Gate	Collector Drain	Emitter Source
Q207	KTC3875	RX TX	0.60	0.05	GND
Q208	KTC3875	RX TX	0.32	4.82	GND
Q301	KRC104S	DTMF TX ON	2.32	0	GND
		DTMF TX OFF	0	4.93	GND
Q302	KRC104S	DTMF TX ON	0	4.93	GND
		DTMF TX OFF	2.32	0	GND

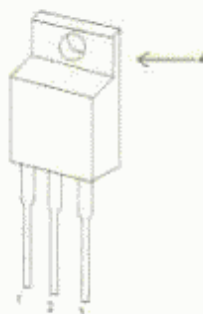
Symbol No.	RX/TX	Pin No.	Voltage	Symbol No.	RX/TX	Pin No.	Voltage
IC1	RX	1	5.13	IC3	RX	4	6.34
		2	4.65		RX	5	13.73
		3	0	IC601	TX	1	1.50
		4	4.90		TX	2	1.50
		5	5.19		TX	3	1.50
		6	4.31		TX	4	1.50
		7	4.31		TX	5	1.50
		8	4.31		TX	6	1.50
		9	5.13		RX	7	1.00
		10	5.19		RX/TX	8	2.94
		11	2.08		RX/TX	9	0.81
		12	0.31		RX/TX	10	0.81
		13	1.30		RX/TX	11	0
		14	1.30		RX/TX	12	0.09
		15	No SQ 0		RX/TX	13	0.09
			SQ 2.40		TX	14	3.50
		16	No SQ 5.68		RX/TX	15	GND
			SQ 0		RX/TX	16	1.01
		17	No SQ 0		RX/TX	17	1.10
			SQ 0.47		RX/TX	18	1.02
		18	0.69		RX/TX	19	1.20
			0.20		RX/TX	20	1.01
		19	GND		RX/TX	21	1.00
		20	1.78		RX	22	1.04
IC2	RX/TX	1	7.85		RX	23	1.04
		2	GND		RX	24	0.81
		3	13.73	IC3	RX/TX	1	GND
IC3	RX	1	1.40			2	GND
		2	0.83			3	GND
		3	GND			4	GND
						5	4.94

Symbol No.	RX/TX	Pin No.	Voltage	Symbol No.	RX/TX	Pin No.	Voltage
IC201	RX/TX	6	4.94	IC204	RX/TX	23	4.92
		7	GND			24	4.94
		8	4.94		TX	25	0
IC202	RX/TX	1	5.05			26	4.9
		2	GND		RX	27	0.65
		3	5.03			28	2.47
IC203	RX/TX	1	5.55			29	4.92
		2	GND			30	4.92
		3	12.62			31	4.92
IC204	RX/TX	1	2.46			32	4.92
		2	2.46			33	4.92
		3	2.47		TX	34	3.59
		4	2.47		RX	35	1.63
		5	2.47		RX/TX	36	0
		6	2.47			37	0
		7	4.94			38	0
		8	4.94		RX	39	4.90
		9	3.29			40	No SQ 4.90
		10	1.65				SQ 4.90
		11	GND			41	No SQ 0
		12	0				SQ 4.90
		13	4.89		RX/TX	42	0
		14	0			43	0
		15	0			44	4.90
		16	0			45	GND
		17	0			46	4.90
		18	5.03			47	2.54
		19	4.27			48	2.54
		20	4.94			49	GND
		21	4.92			50	4.90
		22	4.92			51	No SQ 5.09
							SQ 0
						52	0
						53	0

Symbol No.	RX/TX	Pin No.	Voltage	Symbol No.	RX/TX	Pin No.	Voltage
IC204	RX/TX	54	0	IC701	RX/TX	11	0
		55	0.17			12	GND
		57	0			13	5.30
		58	GND			14	0
		59	4.50			15	RX 4.70
		60	2.46			15	TX 0
		61	2.46			16	2.70
		62	2.46			1	ON 2.77
		63	2.46			1	OFF 4.90
		64	2.46			2	ON 0
		65	2.47			2	OFF 4.90
		67	2.47			3	ON 2.75
		68	2.47			3	OFF 4.94
		69	2.47			4	ON 1.50
		70	2.47			4	OFF 4.94
		71	2.47			5	ON 1.5
		72	2.47			5	OFF 4.04
		73	2.47			6	ON GND
		74	2.47			6	OFF
		75	2.47			7	ON 1.20
		76	2.47			7	OFF 0
IC701	RX/TX	77	2.47	IC301	TX DTMF	8	ON 1.32
		78	2.47			8	OFF 4.94
		79	2.47			9	ON 1.52
		80	2.47			9	OFF 4.94
		1	2.5			10	ON 2.70
		2	0			10	OFF 0
		3	0			11	ON 1.50
		4	0			11	OFF 0
		5	5.44			12	ON 1.50
		6	4.74			12	OFF 0
IC701	RX/TX	7	0			13	ON 2.75
		8	0			13	OFF 0
		9	3.80			14	ON 1.50
		10	5.50			14	OFF 0
						15	ON 0
						15	OFF 0
						16	ON 1.50
						16	OFF 0

SEMICONDUCTOR LEAD IDENTIFICATION AND IC INTERNAL DIAGRAMS

2SC1971



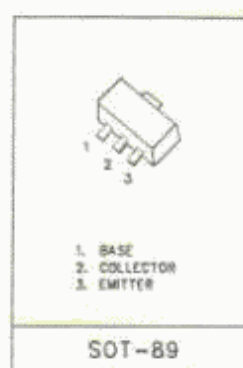
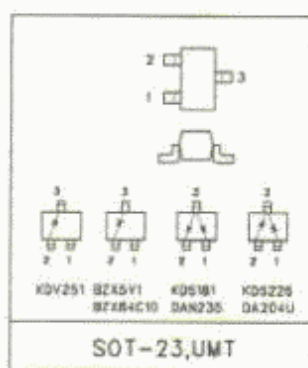
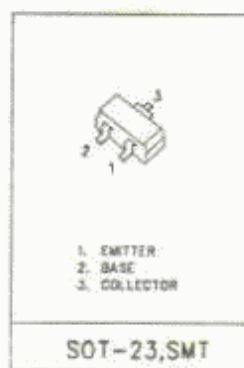
1. BASE
2. EMITTER (PIN)
3. COLLECTOR
4. PIN (EMITTER)

2SB1292



1. BASE
2. COLLECTOR
3. EMITTER

UM9401



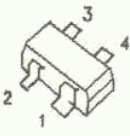
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KTC3875 KTC1505
KRC114S 2SA1576R
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2SC2058-K
KRC104S
KRA107S
2SC3356

KDS181



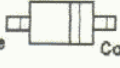
KTC4375
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2SA1797
2SC2954

3SK131




1. SOURCE
2. DRAIN
3. GATE2
3. GATE1

MOS FET

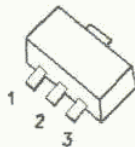


Anode Cathode



Z-DIODE DTZ2.2A
1SS355 1SV215

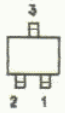
DIODE



1. VCC
2. GND
3. OUT

SOT-89

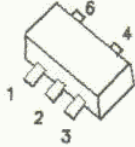
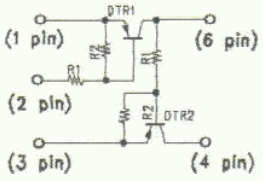
2SK880



1. SOURCE
2. DRAIN
3. GATE

J FET

UMC5NTR

COLLECTORPIN ARRANGEMENT

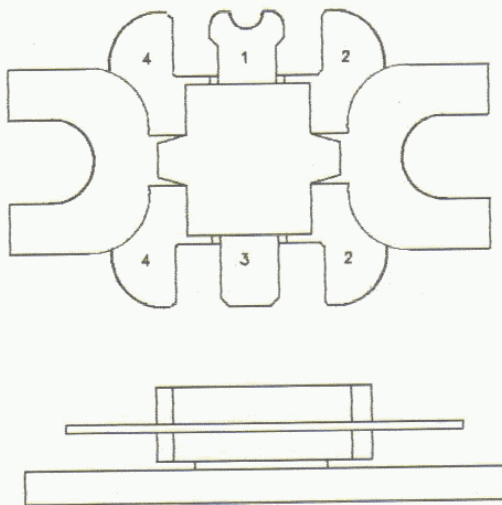
	GND - OUT - IN
Tr1	1 - 6 - 2
Tr2	3 - 4 - 6

DTr1: R1=47Kohm / R2=47Kohm
DTr2: R1=4.7Kohm / R2=10Kohm

TK10487M



2SC1946A

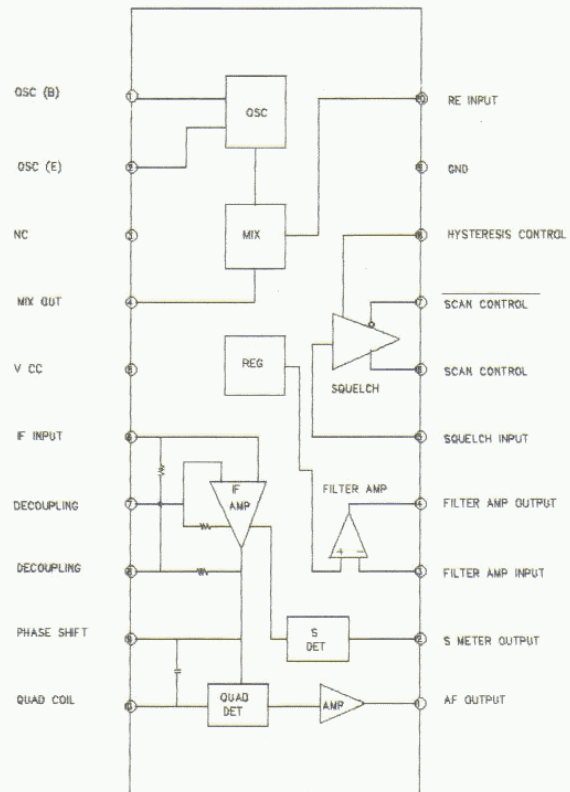


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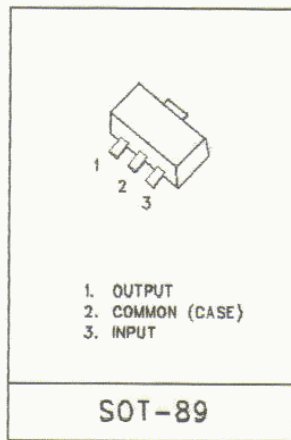
2. EMITTER (FLANGE)

3. BASE

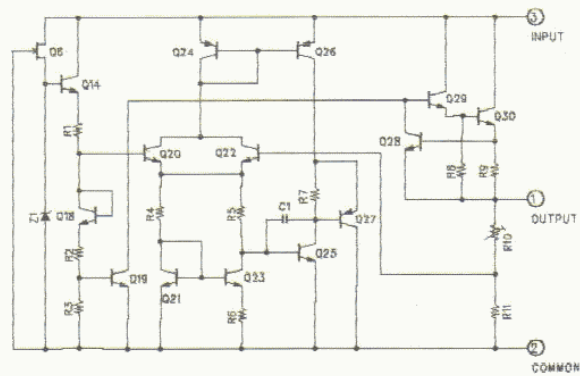
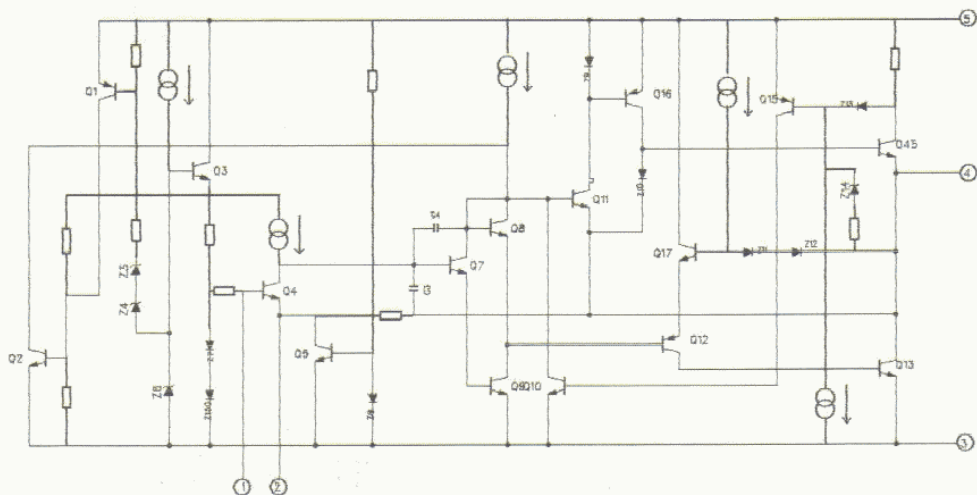
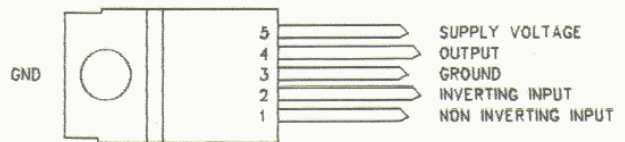
4. EMITTER (FLANGE)



KIA78L05F/KIA78L08F

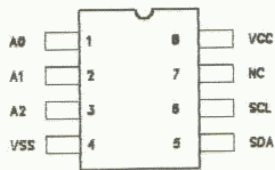


TDA2003



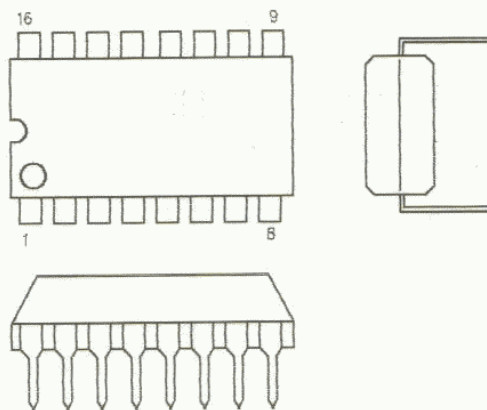
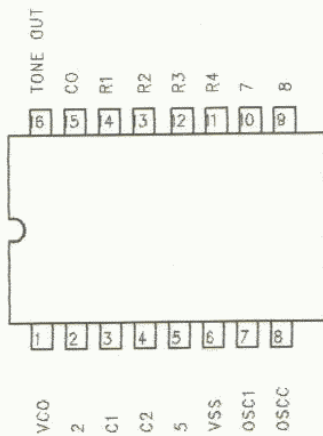
24C02

IN FUNCTIONS

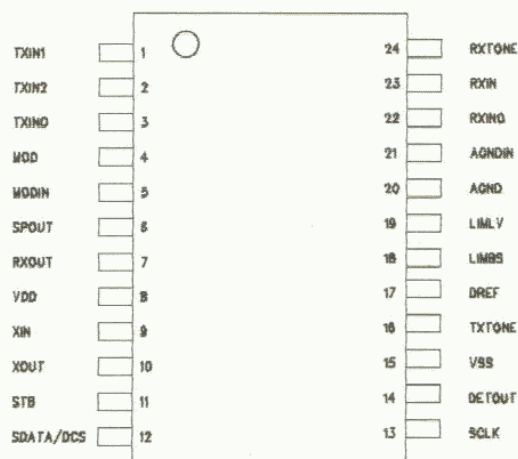


PIN NAME	FUNCTION
A0,A1,A2	Device Address Inputs
SDA	Serial Data/Address
SCL	Serial Clock
NC	No Connect
VCC	+5V Power Supply
VSS	Ground

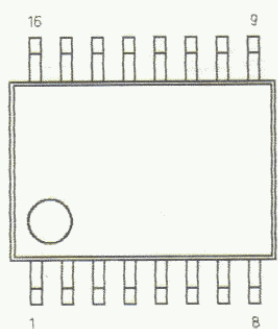
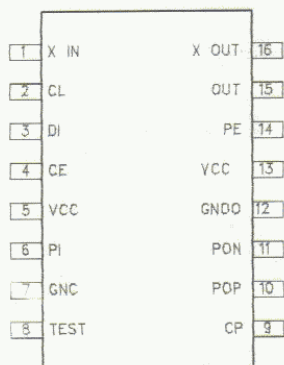
LC7365N



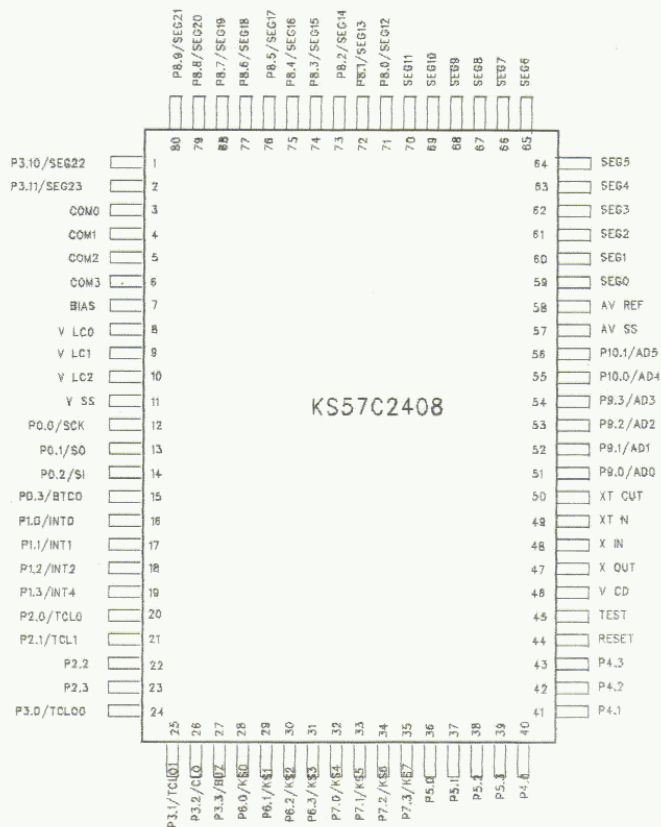
AK2345

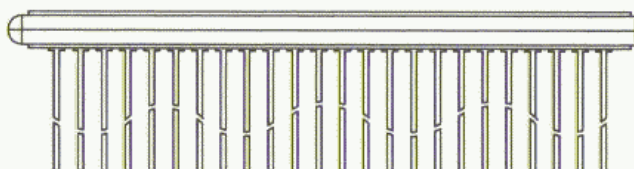
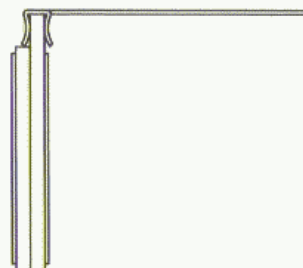
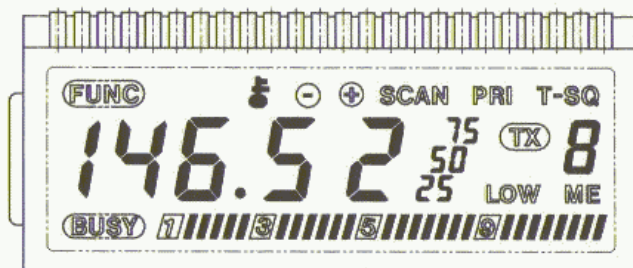


LV2105V



SY-252





NOTE.

1. C-MOS: KS57C2408
2. 1/4 DUTY, 1/3 BIAS.
3. 5.0 VOP.
4. VIEWING DIRECTION: 6:00
5. OPERATING TEMP: -20°C TO +80°C
6. STORAGE TEMP: -30°C TO +80°C
7. APPLICATION: VHF
8. POSITIVE TYPE.
9. FRONT POL: T/M
REAR POL: T/F

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
BATT	K	5A	⊖	4A	⊕	3A	.	SCAN	2A	PRI	TX	T	1A	-SQ	COM1	.	.	.
FUNC	5F	5B	4F	4B	3F	3B	.	2F	2B	7S	LOW	1F	1B	P1	.	COM2	.	.
K1	5E	5G	4E	4G	3E	3G	P2	2E	2G	50	25	1E	1G	ME	.	.	COM3	.
BUSY	5D	5C	4D	4C	3D	3C	S1	2D	2C	S2	S3	1D	1C	S4	.	.	.	COM4